

**Meeting Minutes, AMS-02 Project Tag-up
February 27, 2006**

Attendees:

Trent Martin/NASA, Mike Fohey/ESCG, Chris Tutt/ESCG, Leland Hill/ESCG, Craig Clark/ESCG, Paul Nemeth/ESCG, John Heilig/ESCG, Tim Urban/ESCG, John Sanford/NASA, Bill Hungerford/MIT, Via telecon: Bob Miley/Boeing, Mike Capell/MIT, Johannes Van Es/NLR

Open Discussion

T. Martin announced that he would like to have the Phase II Safety Data Package to the AMS CCB for baselining by March 31, 2006. There was limited discussion about TBDs and documenting non-compliances in the Hazard Reports. It was decided that as the document should be baselined with TBDs and non-compliances, but efforts should be made to close as many as possible before baselining.

J. Heilig questioned the status of the Integration Facility build out at CERN. He has not had any updates from the Collaboration and is concerned that this may soon become a "critical path" issue.

Agenda Item 1: Open Paper Management Tool (OPMT) – Paul Nemeth

Paul Nemeth conducted a review of the OPMT Open Items Report.

A total of 14 Action Items were closed, including 11 that were past due. The current status of the OPMT is as follows:

Total Action Items:	578	Total Action Items Open:	49
Total Action Items Closed:	529	Action Items Past Due:	43

A summary of the past due Action Items is included as Attachment 1

The full OPMT has been updated to reflect all updates and status reports that were provided at this Tag-up. The updated OPMT can be accessed from the JSC EA AMS-02 Homepage or using this link:

<http://ams-02project.jsc.nasa.gov/Documents/OPMT/OPMT20060113.pdf>.

Action Item Review:

04-051: Complete and Sign the AMS PIA – The SEWG presentation is scheduled for March 7th to review the status of the SSRMS power issue. Dan Hartman has agreed to push the PIA through the technical concurrence cycle including the PMIT, and then to shelf the PIA until a launch vehicle is identified.

04-056: Provide the plan for Surveillance of Safety Critical assembly and test steps of Collaboration Hardware – This item is still in-work. Assignment of action is continuing; with 5 Hazard Reports left to be completed. Some technical issues remain; but the

Safety Package shall be completed (in best possible form), and presented to the CCB by March 31st.

05-018: Thermal Testing Requirements – The UPS SOW has been revised and is in the review cycle.

05-022: Cryosystem Component Testing – On-hold pending resolution of the Magnet Systems Integration contract.

05-023: STA Gate Valve – On-hold pending the JS/SCL Contract to perform the STA work in Culham.

05-024: Flight Unit Gate Valve – On-hold pending the JS/SCL Contract to perform the STA work in Culham.

05-039: Total Mass Capability of the USS-02 – Preliminary Analysis results were presented at the AMS TIM in January; showing USS and Vacuum Case looking promising. Loads definition for the individual detectors is in-work. ISS loads case on hold pending outcome of discussions with Boeing.

05-044: Burst Disk Vent Valves – Phil Mott has this in-work.

05-048: LSS Vacuum Gages – Gaeten has been reminded of this work; and it is discussed regularly in the Thermal Telecon.

05-049: Supercritical Startup – Preliminary test results show that pump can be started with vapor in the pump. Waiting on further verification from PDT along with pump head pressure data.

05-054: Leak Before Burst Analysis – Chris Tutt to pulse Glenn Ecord and Bill Manha.

05-062: TTCB Integration – Still no hard decision on PVVV location (will be on upper support rings, but not where on them). Will be discussed on Wednesday at the charge cable mounting telecon.

05-065: TTCS Tube Routing – Phil Mott has provided comments to the design to Antonio Alvino/INFN. Johannes Van Es to pulse Robert Becker and Stephen Harrison.

05-067: TTCS Tube Relative Displacements – No Status. Chris Tutt to pulse Bruce Sommer.

05-068: Tracker Radiator Integration Jig – This actionee may change to INFN – Antonio Alvino, if Roberto Battiston concurs. Johannes Van Es to pulse Roberto.

05-069: Thermal Tubing Support Beam – Will be discussed on Wednesday at the charge cable mounting telecon.

05-072: Cryogenic GSE Safety Information – Alexander Grechko has supplied this information and it is under review by Art Nelson. This action to be closed once confirmed that all necessary data has been included.

05-074: CGSE Support at the Pad – This action due date has been changed to June 1, 2006.

05-075: Using magnet at ESTEC – Craig Clark to pulse Joe Burger and Marco Molina.

05-076: GSE Layouts – Layouts were received for the bulk of the configurations. Minimum requirement for Transportation is the Transportation Relief Valve. Art Nelson to review and send Alexander Gretchko any remaining detailed questions.

05-080: Pilot Valve Vacuum Vessel Installation – This action is to be reviewed for possible consolidation with 05-062.

05-081: Charged Magnet during Beam Testing – This action due date is changed to January 1, 2007. The location for the Beam Test is not defined; therefore the ferrous materials cannot be defined at this time.

AMS_02-CDR-08: Shear Analysis of Items in Enlarged Holes – This action is not a priority at this time; and is on hold.

AMS_02-PDS-CDR-06: Thermal Optical Properties for the PDS – On-hold pending resolution of ETH/CGS contract.

AMS_02-PDS-CDR-08: Capacitance requirement for PDS – On-hold pending resolution of ETH/CGS contract.

AMS_02-PDS-CDR-09-2: Thermal Optical Properties for the PDS – On-hold pending resolution of ETH/CGS contract.

AMS_02-Thermal_CDR-17: Insert test and its applicability to different size of insert – Included in CAST SOW; however go-ahead for CAST to proceed has not been received from appropriate source.

AMS_02-Thermal_CDR-57: Still under review. Craig Clark to discuss with Ulrich Becker and present possible options to resolve problem.

AMS_02-Thermal_CDR-68: TRD Attitudes – Closed. OHB has stated the single node model is sufficient for TRD.

AMS_02-Thermal_CDR-82: CAB Heater Schematic – Draft document to be reviewed by Craig Clark to determine closure status.

AMS_02-TTCS_PDR-02: Thermal bars frequency analysis – Bruce Sommer to pulse Dr. Lo.

AMS_02-TTCS_PDR-03: Evaporator tail need a redesign – Bart needs the Finite Element Model from NIKHEF. FEM was apparently developed; however developer is no longer employed and status is questionable. Johannes Van Es to pulse Bart Verlaat.

AMS_02-TTCS_PDR-05: Incorrect Figure Title - Johannes Van Es asked for new date from Bart Verlaat.

AMS_02-TTCS_PDR-06: Installation deformation release - Bart needs the Finite Element Model from NIKHEF. FEM was apparently developed; however developer is no longer employed and status is questionable. Johannes Van Es to pulse Bart Verlaat.

AMS_02-TTCS_PDR-07: Visual Inspection of the weld and fracture analysis – Chris Tutt to pulse Dan Rybicki.

AMS_02-TTCS_PDR-08: Leak Integrity Test still TBD – Johannes Van Es will supply the procedure to Bruce Sommer by no later than March 31st.

AMS_02-TTCS_PDR-09: TTCS Tube Routing – Tube routing presented at the AMS General TIM in January. Under review by Phil Mott, Robert Becker and Stephen Harrison. Comments received from Phil Mott. Johannes Van Es to pulse Robert Becker and Stephen Harrison. Action to be reviewed for possible consolidation with 05-069.

AMS_02-TTCS_PDR-10: Negative Safety Margin – Xinmei Qi/SYSU performed the new analysis and shows positive margins. Johannes to forward these results to Bruce Sommer this week.

AMS_02-TTCS_PDR-11: Bolt and Insert Analysis - Xinmei Qi/SYSU performed the new analysis and shows positive margins. Johannes to forward these results to Bruce Sommer this week.

AMS_02-TTCS_PDR-12: Finite Element Analysis approach and fastener analysis - Xinmei Qi/SYSU performed the new analysis and shows positive margins. Johannes to forward these results to Bruce Sommer this week.

AMS_02-TTCS_PDR-19: TTCrate Location – Document has been released. Johannes Van Es to forward to Mike Capell and Craig Clark for closure status.

AMS_02-TTCS_PDR-20: Modes Missing - Document has been released. Johannes Van Es to forward to Mike Capell and Craig Clark for closure status.

AMS_02-TTCS_PDR-25: TTCS Heater Controls – Document has been released; but some actions were assigned based on latest release. Johannes Van Es has proposed a redesign to resolve all issues and submitted for review to TTCS group. Johannes Van Es to forward a copy of the proposal for review and inclusion in the Safety Package.

UPS-CDR-04: BMS Qualification Test Report – Qualification testing has been completed; Tim Urban to pulse Rob Gitzendanner concerning status of report.

Meeting was adjourned at 10:05.



Attachment 1

OPMT Action Items Report List of Action Items Past Due March 3, 2006

Open Paper Management Tool (OPMT) Statistics

<i>Total Action Items:</i>	<i>578</i>	<i>Total Action Items Open:</i>	<i>49</i>
<i>Total Action Items Closed:</i>	<i>529</i>	<i>Action Items Past Due:</i>	<i>43</i>

List of Action Items Past Due:

<i>Action Item Number:</i>	<i>Date Due:</i>	<i>Action Item Number:</i>	<i>Date Due:</i>	<i>Action Item Number:</i>	<i>Date Due:</i>
<i>Action Item 04-051</i>	<i>08/30/2005</i>	<i>Action Item 05-076</i>	<i>2/1/2006</i>	<i>AMS_02-TTCS_PDR-12</i>	<i>07/15/2005</i>
<i>Action Item 04-056</i>	<i>08/15/2005</i>	<i>Action Item 05-080</i>	<i>12/01/2005</i>	<i>AMS_02-TTCS_PDR-19</i>	<i>07/15/2005</i>
<i>Action Item 04-120</i>	<i>08/15/2005</i>	<i>Action Item 05-081</i>	<i>12/01/2005</i>	<i>AMS_02-TTCS_PDR-20</i>	<i>07/15/2005</i>
<i>Action Item 05-018</i>	<i>10/01/2005</i>	<i>AMS_02-CDR-08</i>	<i>1/3/2006</i>	<i>AMS_02-TTCS_PDR-25</i>	<i>06/30/2005</i>
<i>Action Item 05-022</i>	<i>11/21/2005</i>	<i>AMS_02-PDS_CDR-06</i>	<i>06/15/2005</i>	<i>UPS-CDR-04</i>	<i>1/3/2006</i>
<i>Action Item 05-023</i>	<i>10/17/2005</i>	<i>AMS_02-PDS_CDR-08</i>	<i>05/16/2005</i>		
<i>Action Item 05-024</i>	<i>11/21/2005</i>	<i>AMS_02-PDS_CDR-09-2</i>	<i>05/16/2005</i>		
<i>Action Item 05-039</i>	<i>1/3/2006</i>	<i>AMS_02-Thermal_CDR-17</i>	<i>1/31/2006</i>		
<i>Action Item 05-044</i>	<i>10/28/2005</i>	<i>AMS_02-Thermal_CDR-57</i>	<i>2/15/2006</i>		
<i>Action Item 05-048</i>	<i>2/1/2006</i>	<i>AMS_02-Thermal_CDR-82</i>	<i>12/01/2005</i>		
<i>Action Item 05-049</i>	<i>2/1/2006</i>	<i>AMS_02-TTCS_PDR-2</i>	<i>07/15/2005</i>		
<i>Action Item 05-054</i>	<i>09/30/2005</i>	<i>AMS_02-TTCS_PDR-3</i>	<i>07/15/2005</i>		
<i>Action Item 05-060</i>	<i>1/3/2006</i>	<i>AMS_02-TTCS_PDR-5</i>	<i>2/6/2006</i>		
<i>Action Item 05-065</i>	<i>1/1/2006</i>	<i>AMS_02-TTCS_PDR-6</i>	<i>07/15/2005</i>		
<i>Action Item 05-067</i>	<i>1/15/2006</i>	<i>AMS_02-TTCS_PDR-7</i>	<i>07/15/2005</i>		
<i>Action Item 05-068</i>	<i>10/31/2005</i>	<i>AMS_02-TTCS_PDR-8</i>	<i>07/15/2005</i>		
<i>Action Item 05-069</i>	<i>09/30/2005</i>	<i>AMS_02-TTCS_PDR-9</i>	<i>07/15/2005</i>		
<i>Action Item 05-072</i>	<i>1/1/2006</i>	<i>AMS_02-TTCS_PDR-10</i>	<i>07/15/2005</i>		
<i>Action Item 05-075</i>	<i>12/01/2005</i>	<i>AMS_02-TTCS_PDR-11</i>	<i>07/15/2005</i>		